

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claims 1, 3-10, 12-18 and 48-72 are pending in this application. Claims 1, 10, 48, 52, 58, 63 and 72 are independent. By this Amendment, independent Claim 72 is added. Support for Claim 72 can be found, for example, in Fig. 4C. No new matter is added.

Independent Claims 1, 10, 48, 52 and 58 stand rejected under 35 U.S.C. §103(a) over International Application Publication No. WO 01/71848 A1 to Atherton¹ in view of U.S. Patent No. 5,892,661 to Stafford et al. ("Stafford"). The rejection is respectfully traversed.

Independent Claim 1 recites an RFID tag including, *inter alia*, a substrate, a first electrically conductive region associated with the top surface of the substrate, and a second electrically conductive region associated with the bottom surface of the substrate and electrically coupled to the first conductive region via non-contact coupling. The first and second conductive regions form an RFID antenna.

In Atherton's label 1000, the tamper track 1005 ("first electrically conductive region") is electrically coupled to the antenna 1003 ("second electrically conductive region") via electrical through connects 1004 as shown in Fig. 10B of Atherton. In this regard, the Official Action acknowledges that the tamper track 1005 is not electrically coupled to the antenna 1003 ("second electrically conductive region") via *non-contact* coupling as defined in independent Claim 1.

¹ WO 01/71848 A1 corresponds to U.S. Patent No. 6,888,509 to Atherton. In the remarks below, reference will be made to Atherton's U.S. patent instead of the international application publication.

Stafford discloses a smartcard having conductive plates 21 and 22 which are electrically coupled without contacting each other as shown in Fig. 1 of Stafford (see also col. 3, lines 21-32 of Stafford). The Official Action maintains that it would have been obvious to modify Atherton's label 1000 by replacing the tamper track 1005, antenna 1003 and electrical through connects 1004 with the capacitive structure formed by Stafford's conductive plates 21 and 22.

However, one skilled in the art would not have looked to Stafford's smartcard to modify Atherton's RFID tamper label. Atherton's RFID tamper label is a tamper indicating device adhesively attached to an object. The tamper indicating device is configured to protect the object from, *inter alia*, theft, product substitution, tampering, and warranty violation (see Abstract and col. 1, lines 9-26 of Atherton). Atherton's device indicates tampering of the object when disruption of the device's antenna is detected. Disruption of the antenna occurs when the electrical connection between the tamper track 1005 and the antenna 1003 is lost due to, for example, physical destruction of the tamper track 1005. Accordingly, Atherton actively uses disruption to the antenna 1003 as a tamper evident indicator. Stated differently, Atherton is not interested in preventing disruption to the antenna, but rather uses the disruption as an indicator that tampering has occurred.

On the other hand, Stafford's smartcard is similar to a credit or debit card that stores information pertaining to the user of the card (see col. 1, lines 8-13 and col. 2, lines 2-5 of Stafford). Thus, this disclosure in Stafford has no relevance to Atherton's RFID tamper label and the RFID tag claimed here. Moreover, Stafford is concerned with configuring the smartcard to prevent the capacitor components from breaking (see col. 1, lines 32-39 of Stafford). That is, Stafford seeks to prevent damage to the antenna of Stafford's smartcard. Thus, Stafford is not concerned with using antenna

damage as a tamper evident indicator like in Atherton, but rather seeks to prevent antenna damage.

In view of the above, one skilled in the art would not have found Stafford's smartcard particularly relevant to Atherton's tamper label. Accordingly, one skilled in the art would not have looked to Stafford's smartcard to modify aspects of Atherton's tamper label. Thus, the combination of features recited in independent Claim 1 would not have been rendered obvious by the combination of Atherton and Stafford. Therefore, independent Claim 1 is patentable over the combination of Atherton and Stafford for at least this reason.

Further, Claim 1 defines that the *non-contact* coupled first and second conductive regions form an RFID antenna. Atherton's tamper track 1005 and antenna 1003 are not coupled via a non-contact coupling, as discussed above. In addition, Stafford's conductive plates 21 and 22 are not the antenna in Stafford's smartcard. Stafford discloses that the antenna is provided below the conductive plate 22 (see col. 2, line 66 to col. 3, line 1 of Stafford). Thus, Stafford's conductive plates 21 and 22 are not a *non-contact* coupled RFID antenna. Stafford discloses that the antenna in the smartcard is designated with reference numeral 32 (see Fig. 5 of Stafford). However, a contact 41 electrically connects the antenna 32 to conductive material 15 and the conductive plate 21 as shown in Fig. 5 of Stafford. Thus, the antenna 32 in Stafford is not a "second electrically conductive region" that that forms a *non-contact* coupled RFID antenna.

Accordingly, the combination of Atherton and Stafford does not disclose, and would not have rendered obvious, an RFID tag having, together with the other claimed features, *non-contact* coupled first and second conductive regions forming

an RFID antenna. Therefore, independent Claim 1 is patentable over the combination of Atherton and Stafford for at least this additional reason.

Independent Claims 10, 48, 52 and 58 each define RFID tags including a non-contact coupling, and thus are patentable over Atherton and Stafford for at least the reasons discussed above.

Independent Claim 63 stands rejected under 35 U.S.C. §103(a) over Atherton in view of Stafford, and further in view of U.S. Patent No. 6,859,745 to Carr et al. ("Carr"). The rejection is respectfully traversed.

Independent Claim 63 is directed to a combination comprising an RFID tag including, *inter alia*, a substrate, an electrically conductive region disposed on the bottom surface of the substrate, and an RFID integrated circuit disposed on the top surface of the substrate and electrically coupled to the electrically conductive region via non-contact coupling.

As discussed above, one skilled in the art would not have looked to Stafford's smartcard to modify Atherton's RFID tamper label to have the claimed non-contact coupling. In addition, Carr fails to overcome the deficiencies of Atherton and Stafford. Thus, independent Claim 63 is patentable over the applied references for at least these reasons.

Dependent Claims 3-9, 12-18 and 49-51, 53-57, 59-62 and 64-71 are patentable over the applied references at least by virtue of their respective dependence from the patentable independent claims. Thus, a detailed discussion of the additional distinguishing features recited in these dependent claims is not set forth at this time.

Withdrawal of the rejections is respectfully requested.

Independent Claim 72 is presented for consideration and also recites a non-contact coupling. Thus, Claim 72 is patentable over the applied references for at least the reasons discussed above, as well as for the additional features this claim recites.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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